Department of Education
OFFICE OF THE SECRETARY

Tasmania

Submission

Senate Standing Committee Inquiry into Academic Standards of School Education

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Contents

Introduction

The Tasmanian Government is committed to the goal of providing high quality education and training for lifelong learning and a skilled workforce. Fundamental to this goal is how well schools prepare students for further education, training and employment.

This submission addresses in detail four areas that have been key in ensuring progress towards the achievement of the Government's vision: curriculum; standards and assessment; senior secondary qualifications; and vocational education and learning (VEL).

1. Tasmanian Curriculum Framework

1.1 Background

The *Tasmanian Curriculum Framework* sets the direction for learning for all students in Tasmanian government schools from Kindergarten to Grade 10. Guided by the Framework, schools design and implement the curriculum in ways that best engage students and enable them to attain their highest possible standards of achievement.

Work is presently underway to refine and improve the Tasmanian Curriculum. Consultation on *Curriculum Framework Policy Options* and processes will provide advice on mandated system requirements for curriculum area provision and assessment.

Materials for each curriculum area are being progressively developed with groups of teachers. They will be released for consultation with all teachers before being finalised.

Additional support materials will be developed as necessary and the *Tasmanian Curriculum Framework* will be progressively implemented from 2008.

1.2 The *Tasmanian Curriculum Framework*

This Framework will contain:

- *Values and Purposes* for Education
- A set of *Learning, Teaching and Assessment Principles*
- Curriculum area descriptions and, in some cases, support materials for the curriculum areas including ICT (in development)
- *Standards and Assessment* information

1.2.1 *Values and Purposes* for Education

Extensive community consultation has led to a set of values and purposes that provide a sound basis for teaching and learning that is provided to Tasmanian students. This set of core values and purposes guides decision-making in relation to curriculum provision and the interactions between all those involved in schools and their communities in Tasmania.

Values

Connectedness – developing a sense of community through friendship, care, compassion, cooperation, acceptance, belonging and sharing.

Resilience – developing self-confidence and self-respect, optimism, perseverance and wellbeing.

Achievement – attaining success, pursuing excellence and being proud of personal achievement.

Creativity – valuing original ideas and demonstrating enterprise and innovation.

Integrity – acting honestly, ethically, and consistently.

Responsibility – accepting individual and collective responsibility and contributing to sustainable community development.

Equity – developing tolerance, respecting difference and encouraging distinctiveness.

Purposes

The purposes of school communities are that all students are learning to:

Learn

Think, know and understand

Create purposeful futures

Act ethically

Relate, participate and care

Live full, healthy lives.

In addition to the Values and Purposes the Department's goals for students is ensuring that they:

Are able to reason, question, make decisions and solve complex problems

Are able to create, communicate and convey ideas clearly and confidently

Have a positive vision for themselves and their future

Are well prepared to participate actively in our democratic community

Understand science and technology and can make thoughtful decisions about their application

School communities determine how to express and elaborate these values, purposes and goals and how to ensure they are evident in the school's curriculum programs, philosophy, classrooms and relationships.

1.2.2 *Learning, Teaching and Assessment Principles*

The *Learning, Teaching and Assessment Principles* detail key beliefs about the role of assessment in the Tasmanian Curriculum.

Learning	Teaching	Assessment
…makes meaning of the world	…develops understanding and the acquisition of knowledge and skills	…focuses on students demonstrating understanding in a range of curriculum areas
…is innate and lifelong	…is based on high expectations and passion for learning	…is designed to improve learning and achievement
…is a personal process	…recognises individual differences, is inclusive and based on a broad range of teaching strategies	…builds opportunities for students to self-assess and negotiate criteria and assessment tasks
…connects prior knowledge and experiences to new information and contexts	…determines what students know and makes connections to students needs, interests and future possibilities	…information is based on valid processes and directly used to plan effective instruction
…is strongly influenced by social interactions	…builds purposeful, positive relationships between all those involved in the educational process	…is fair and inclusive of judgements from students, peers, teachers, parents and others
…is affected by emotions	…provides a safe and positive learning environment	…allows for the development of the wellbeing of all partners in the learning and teaching process
..is strongly influenced by personal identity and motivation	…builds positive expectations and confidence in students	…provides timely, accurate and positive feedback to students
…depends on meaningful information and experiences	… involves students in setting goals and connects what is taught to life and further learning	…enables students to be clear about what is being assessed and how this connects to life and further learning
…is enhanced when students are aware of how	…explicitly focuses on thinking skills in all	…encourages students to reflect on their learning and the

thinking and learning occur	curriculum areas	development of thinking skills
…enables students to demonstrate their understanding in new ways	… allows students to transfer their learning to new problems and situations	…explicitly tests students ability to apply their learning in new contexts

1.2.3 Curriculum Area Descriptions

Curriculum area descriptions are being developed in consultation with teachers in schools. These documents will guide school-based curriculum design by describing where appropriate the core content, processes and skills for each curriculum area while allowing sufficient flexibility for schools and teachers to make all Tasmanian students' educational experiences personal, innovative and challenging. Where applicable, the core content is based on the National Statements of Learning. The statements incorporate thinking skills and the use of ICT across the curriculum.

Curriculum areas

The Tasmanian curriculum is organised into seven curriculum areas:

- English – literacy (including Languages other than English)
- Mathematics – numeracy
- Health and Wellbeing
- Science
- Society and History
- Arts, and
- Vocational and Applied Learning

Two additional areas – Information and Communication Technologies (ICT) and Thinking skills – are central to student learning and will be taught across all curriculum areas.

Curriculum area descriptions illustrate the links between each curriculum area to further study in Years 11 and 12. For example, the draft mathematics-numeracy *description* states that

> "The study of mathematics–numeracy using this syllabus during the K–10 years of schooling prepares students for further studies in Mathematics in the senior secondary years.
>
> Students assessed within standard five upper progression should be capable of successful study of Mathematics Applied Senior Secondary 5C during Year 11 or 12. Students assessed within Standard 5 Middle progression should consider a pathway that leads to success in Mathematics Applied Senior Secondary 5C over two years.
>
> Students exiting Grade 10 who wish to study Mathematics Methods Senior Secondary 5C during Year 11 should have successfully undertaken Mathematics Methods Senior Secondary 4B **concurrentl**y with achieving standard five upper progression during the K–10 years."

Curriculum area descriptions incorporate national curriculum statements, where relevant. In the mathematics–numeracy syllabus the core content strands, learning opportunities, standards

and progression statements incorporate directly, or reflect, *The Statements of Learning for Mathematics*. As the statements of learning are embedded in this syllabus, teachers using it will be covering the requirements for national consistency in curriculum outcomes.

1.2.4 *Standards and Assessment* information that accompany each of the curriculum area description statements

Progression levels for opportunities to learn and assessment ratings

The Tasmanian Curriculum Framework explains the scope and sequence of learning opportunities for students as they progress from Kindergarten to Year 10. So that students are challenged to improve their learning, they are provided with opportunities to learn that are in advance of their expected assessment ratings. Teachers are advised to plan learning opportunities across a range of progressions for any year group. Most students take at least a year to consolidate ideas and to demonstrate understanding following the teaching of new concepts. More able students will understand ideas quickly and others will take up to two years to reach the same level of understanding.

Within the five standards from Kindergarten to Year 10 there are currently 15 progressions. Following teacher feedback during the present consultations, this may alter. The progressions are currently designated by L (Lower), M (Middle) and U (Upper).

The table below provides some guidance about the range of learning opportunities required within each year group. Very few students in each year group across the state will require opportunities to learn that fall outside the range described below.

Progression levels for opportunities to learn						
Year level	**Kinder – Prep**	**Years 1 and 2**	**Years 3 and 4**	**Years 5 and 6**	**Years 7 and 8**	**Years 9 and 10**
Opportunities to learn	1L – 2L	1U – 2U	2M – 3U	3L - 4M	3U – 5L	4M – 5U

A summary set of assessment indicators is to be provided with each syllabus, where there is a requirement for detailed assessment. Students do not have to be capable of achieving everything listed within a particular progression to be rated as performing at that level. The indicators of achievement are not a set of assessment criteria to be ticked off. An on-balance judgement is made about whether a student's performance is of similar difficulty to those listed. In effect, if students are deemed to be capable of achieving everything listed in a particular progression, it is most likely that they can also achieve a number of things from the next level and may be better judged as working well within that progression.

It is expected that, given the opportunities to learn, as outlined in the previous table, the spread of assessment ratings would be as described in the table below. Very few students in the year groups would be expected to be assessed outside this range by the end of the year.

Progression levels for assessment ratings						
Year level	**Kinder – Prep**	**Years 1 and 2**	**Years 3 and 4**	**Years 5 and 6**	**Years 7 and 8**	**Years 9 and 10**
Assessment Ratings	1L – 1U	1M – 2M	2L – 3M	2U – 4L	3M – 4U	4L – 5U

2. Curriculum Standards and Assessment

2.1 Background

Since 2002 major work has been undertaken in Tasmania to establish five empirically-based standards from Kindergarten to Grade 10 for curriculum areas and to devise consistent ways of measuring student achievement against these standards.

The key business unit driving the work has been the former Office for Educational Review (OER), now Educational Performance Services (EPS).

2.2. Calibration of standards

The five standards were initially developed and described through the professional knowledge of experts developing the Tasmanian curriculum framework. In order to provide a means for teachers to assess students against the standards in a way that was comparable across schools, a process of calibration was initiated.

The Rasch model of measurement was used to derive the measurement scales. This model of educational measurement is widely used nationally and internationally.

Calibration involves identifying an internal scale for the standards using a series of test items given to students from a range of grades. Student responses to these questions enable an item map to be developed which is used to determine cut offs for each of the standards. The three progressions within each standard were then described using the evidence from the students' response as to what they understood and were able to do.

2.3 The calibration process

The calibration process has been applied to six curriculum areas. Three calibrations were undertaken by EPS and three were contracted to the Australian Council for Educational Research (ACER). Staff were appointed to the projects because of their recognised abilities within the appropriate curriculum area.

2.3.1 Stages in the calibration process

2.3.1.1 Item writing

Items for the testing of students were written either by practising teachers or by staff at ACER. Nearly all items were 'open-ended', constructed-response questions, and were marked using criterion-based rating scales. Generally feedback from teachers and students about the items was very positive. Rating scales were initially developed during item writing and were refined following trialling of the items and final marking.

2.3.1.2 Construction of tests

A series of tests was constructed using the pool of items that were accepted by the review panels and the curriculum and measurement experts. Each test was targeted at a year group, although items in each test were selected so that they were able to assess the full range of abilities likely to be encountered in the students who sat

them. Calibration tests contained 'link items' - items that appeared in pairs of tests. For example, the same item might have appeared in a test targeted at Year 4 students as well as in a different test, targeted at Year 6 students. Parallel tests, linked by common items, were also used in each year group so that information about a relatively large number of items at each year was available. Using the Rasch Model, it was possible to estimate the relative difficulties of all items. Because the Rasch Model enables students' abilities on the underlying construct to be estimated as well, the relative abilities of students sitting the tests could also be estimated.

2.3.1.3 Marking of tests

Items were marked centrally and results were analysed using Rasch Measurement software. Each test was analysed separately for the following:

- targeting of items and persons (ensuring that the item difficulties and the students' abilities, generally, were well matched);
- reliability of the assessment instruments;
- item fit (ensuring that the items fitted the model reasonably, so that each item measured an aspect of the underlying construct);
- spread of item difficulties (ensuring that the item difficulties varied in reasonably small increments from 'very easy' to 'very difficult' for the target group, thereby enabling students' abilities to be estimated on the resulting calibrated scale);
- differential item functioning (DIF, or 'item bias', in which students of the same ability had different probabilities of success on particular items according to the demographic group they belonged to – eg 'boy', 'girl', 'Indigenous');
- rating scale design (ensuring that the categories for each rating scale were ordered such that it was more difficult to obtain a 'higher' rating than an 'easier' rating, and that this order was reflected in the category probability curves).

2.3.1.4 Locating Standards of Performance on Calibrated Scales

After the items had been calibrated (located on an underlying measurement scale according to their difficulties), five 'standards' were defined. A standard, in this sense, could be thought of as a 'zone' on the calibrated scale, encompassing a range of difficulties (or abilities), with the items and the responses to those items within the standard reflecting the qualitative characteristics of the description of the standard. Each progression level for each standard, for each curriculum area calibrated, was described briefly and the descriptions ('progression statements') and support materials were made available on the Department's internet site.[1]

The boundaries of each standard were not, however, entirely governed by the items themselves. There were data showing the abilities of students in different year groups, so reference to the distribution of person abilities was also made in order to

[1] http://www.ltag.education.tas.gov.au/assessment/outcomes/progstate.htm (accessed September 2006)

identify the standards. For example, the lower boundary of Standard 5 was set so as there would be a proportion of students who would be expected to achieve at that standard.

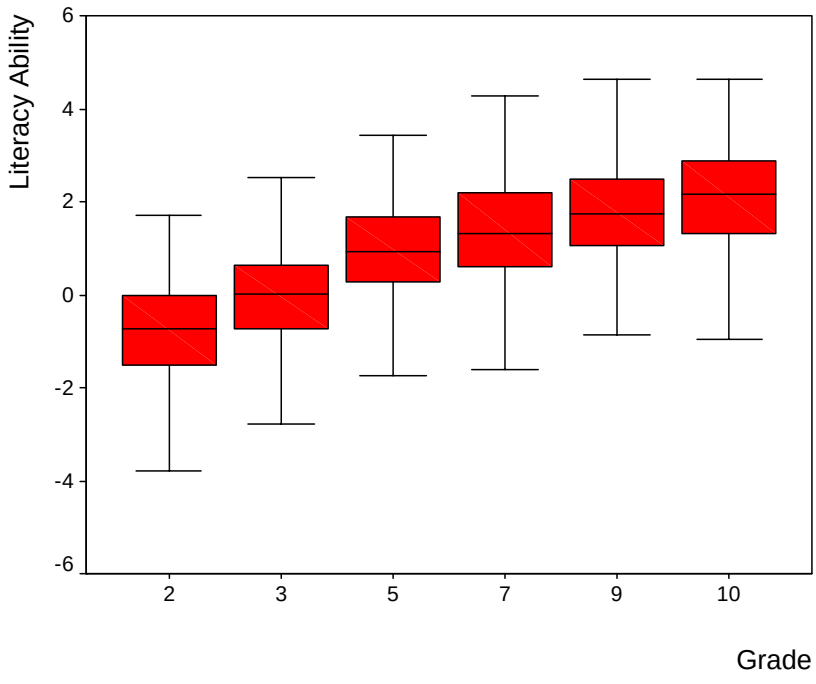
2.3.1.5 Modifications

As a result of the calibration process some modifications to curriculum documents were made. This is illustrative of the usefulness of empirical research and the Rasch Model in curriculum design, as it is essential that teachers match their teaching to the abilities of students, and not to preconceived ideas of the range of abilities of students at particular year levels.

2.3.1.6 Finding of non-linear growth in ability

Another result that confounded the locating of standards on the calibrated scales was the non-linear growth in ability that was found for all calibrated key elements. Figure 1 shows the estimated abilities of students by year group (or grade) from the calibration. It should be noted that the students who participated in the calibration study were a sample of their year group, and that the extreme abilities shown on each whisker were subject to greater error than those represented by the 'boxes'. Nevertheless, the non-linear growth in estimated abilities from year group to year group is apparent, with a 'flattening' of growth of ability at about year seven and continuing through to year 10. A similar pattern was observed by Rowe and Hill (1996: 335) in studying students' progress on the *English Profiles Reading Strand*.

Figure 1: Estimated Ability By Year Group: Calibration Sample



Note: the scale shown on the ordinate is in logits.

Another way of approaching this process would be to calibrate each scale first, then divide the resulting scale into meaningful standards and progression levels, and then describe each standard and level.

2.4 Aligning the Department's Statewide Tests to Moderate Literacy and Numeracy Assessments

Since 2001, the Department has used the Western Australian Literacy and Numeracy Assessment (WALNA) tests in Years 3, 5 and 7. These tests, like all other full-cohort literacy and numeracy tests in other Australian jurisdictions, are based on the Rasch Model and are equated ('made comparable') from calendar year to calendar year and equated vertically for Years 3, 5 and 7. This has the effect that the resulting scale scores[2] are comparable (within error) from chronological year to chronological year and from grade (year group) to grade. Thus, a reading scale score of 500, say, for a student in Year 5 in 2005 would be comparable with the same scale score of 500 for a student in Year 3 in 2006, because the scale score of 500 for reading suggests similar reading ability, regardless of chronological year or grade.

In 2004, about 300 Year 9 students in Tasmania sat the 2004 Year 7 tests in reading, writing and numeracy; and a similar number of Year 7 students sat the Year 9 tests. This enabled the two test scales to be equated using the Rasch Model (using 'common-person equating). Then, calibrated scales for aspects of literacy and numeracy were constructed, and new scale scores derived.

Next, the monitoring-test scales and the calibration scales were equated. This was possible because some 300 students in each of Years 3, 5, 7 and 9 sat both the 2004 monitoring test and the calibration tasks, and the scales could therefore be equated through common-person equating. One reason for this equating was the Departmental requirement that all monitoring-test results from 2005 onwards be reported against the standards and progression statements of the relevant key elements in the curriculum framework. An obvious key issue concerned whether or not the two tests (the monitoring test in numeracy, say, and the calibration tests) measured the same construct. Evidence suggested that, at least, one was a strong predictor of the other, as the results for the calibration tests and their respective monitoring-tests counterparts were strongly correlated[3]. Also, when the distributions of abilities of students in a particular year group for both the monitoring tests and the appropriate calibration key elements were compared, the distributions were similar, suggesting that the pseudo-random samples used in the calibration were, in fact, reasonably random.

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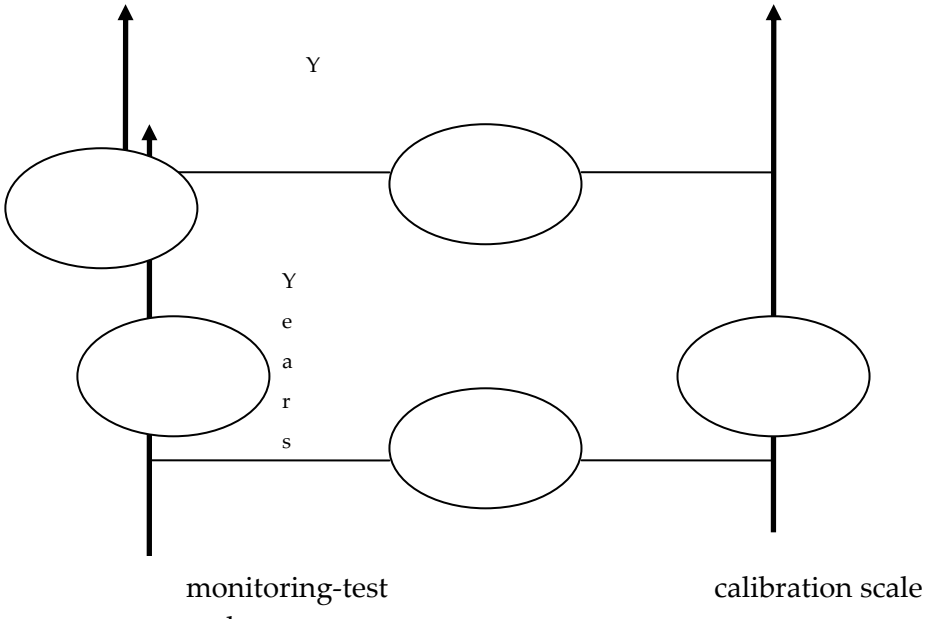
[2] A scale score can be derived by multiplying the logit (of an item difficulty or a person ability) by a constant and adding another constant. Since the transformation is linear, the interval-scale property of the Rasch Model is preserved.

[3] Typically $r > 0.8$ after correcting for attenuation, but further research is needed to investigate this for literacy.

Figure 2: Equating the Monitoring Test and Calibration Scales



2.6 Moderation of Teacher Assessments

2.6.1 Background

A requirement of the implementation of the curriculum framework is that teachers assess their students' performance against the standards and progression levels for each curriculum area. Experience shows that assessments made by teachers need to be moderated in order to improve inter-teacher reliability.

2.6.2 Consensus moderation

Consensus moderation describes the approach whereby teachers use protocols to collectively discuss and assess samples of a student's work, in order to reach a common assessment award. This is used to assist teachers in interpreting progression statements in more detail, as well as assisting in methods of task design and examining student work for a particular curriculum area.

Consensus moderation encompasses both in-school moderation and cross-school or cluster moderation. Many schools now have sound in-school moderation processes to ensure that there is a shared understanding of standards among teachers in a school. These processes are often associated with collaborative planning opportunities. They are most powerful where these are embedded in the structural organisation of the school.

Moderation between schools is an opportunity to focus on questions that arise about the standard of work that has been moderated within the school. Teachers within a cluster or group of schools have conversations based on the evidence in student work and collaboratively assign a standard to the piece of work.

Schools have three student free days per year for moderation purposes. Two of these days are cluster days and one day is an in-school day. The days are used for teachers to share questions they have in relation to the assessment of work, or a body of work, and they seek advice, in a spirit of trust, from their colleagues. This helps to create a potentially powerful conversation which generates ideas on how students can be moved from where they are demonstrating evidence to achievement against a higher standard or progression. Through participation in such conversations a shared understanding about the standards and how students can be helped to develop increased understanding can be built across schools and clusters.

An issue with consensus moderation is that variations may still remain in assessment outcomes because of slightly different interpretations of progression statements and work samples.

2.6.3 Statistical moderation

A method of 'statistical moderation' has also been developed. This involves comparing the results of students, grouped by school, on a centrally administered and rated test with the group's teacher-awarded results. Essentially, the approach involves determining whether the 'ballpark' of teacher-awarded results was similar to the 'ballpark' of centrally awarded results that were based on a common, centrally administered task that was, in turn, equated to the relevant calibration scale.

The Department's Literacy and Numeracy tests are used as moderating instruments in Years 3, 5, 7 and 9. This is possible because the results are reported against the curriculum framework standards and progression levels - this is made possible because of the monitoring-test scales having been equated to their respective calibration scales.

For year groups in which 'actual' results for both central and teacher-based assessments exist (Years 3, 5, 7 and 9 for, and Years 6 and 10 for *Health and Wellbeing*), it is possible to make a reasoned judgement as to whether the teacher-based assessments, for each school treated as a group, are comparable with the centrally based assessments, also treated as a group. Measures of central tendency and dispersion are used to make this judgement. Measures of dispersion are necessary, because it has been found that teachers tend to 'clump' their assessment awards towards the average award, and the range of awards given is much less than the ranges of awards for the school as measured by the central assessments, even allowing for some regression-to-the-mean effects that would be expected from assessing students on multiple occasions. (The actual spread of centrally measured awards is reduced by a constant in order to model this effect.)

Because teacher-based assessments, from Prep to year 10, for all Government-school students, for the three key elements to be assessed in 2005 against the new curriculum framework, were entered into the Department's central Student Assessment and Reporting Information System (SARIS),[4] each student's results for the centralised assessment tests (the monitoring tests, for literacy and numeracy and the *Health and Wellbeing* Guiding Assessment Tasks) could be matched centrally in a matter of a few minutes. Because the monitoring-test scales and the Guiding Assessment Tasks had been equated with their respective calibration scales, centrally

[4] See http://wwwfp.education.tas.gov.au/oer/SARIS/default.htm (accessed September 2006).

based assessments for *Health and Wellbeing*, literacy and numeracy could be compared directly with teacher-based assessments (because all were made against the standards and progression levels).

In addition, results for some year groups are 'modelled' from actual data, by interpolating (and sometimes extrapolating). For example, a hypothetical distribution of awards for Year 4, say, could be generated for a school by interpolating the mean and standard deviation from data that existed for Years 3 and 5. While this procedure is somewhat speculative and subject to cohort effects, it is found to be helpful to schools by sometimes encouraging teachers reconsider their awards in the light of awards in their schools for adjacent year groups. In subsequent years, 2006 and 2007, the modelling for all year groups can be based on extrapolation from test and assessment data collected in previous years. It is anticipated that now that teachers are in the third year of using the standards there will be greater consistency between teacher judgements and statistical predictions of student achievement.

The approaches used in 2005 involved using F-tests and matched-pair t-tests[5] to determine if the two groups of results were significantly different from each other. An inevitable problem occurred with levels of significance and sample size, so an arbitrary difference was used to flag schools that might have over- or under-estimated their students' performances, in addition to carrying out the tests. It is likely that this process will be refined in future (perhaps by using non-parametric tests).

In cases were there was a marked difference between the school's assessment and the centralised assessment, schools were contacted and given feedback. They had the opportunity to check the assessments of their students and to re-enter the results into SARIS if they determined this was necessary. The entire procedure was voluntary and most schools noted the feedback.

Tasmania is the only state in Australia where teacher assessments of all students are collected centrally. Collection of this data enables Tasmania to meet Australian Government requirements in respect to A-E assessments providing parents with state-wide comparisons of their child's achievements.

This data is potentially an incredibly powerful tool when used by schools to determine priorities and directions for future learning and allocation of resources. EPS provides schools and Learning Services with data and modelled data that can be used to identify important questions to be addressed within the school. EPS is working with schools to ensure that the feedback given is timely and relevant.

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[5] This was achieved by 'scoring' 1L (standard 1, lower) as 1, 1M (standard 1, middle) as 2 and so on, remembering that each progression level represented approximately the same range of difficulty. The assumptions of normality and equal variances were not tested rigorously, though in the moderated results, schools responded to suggestions regarding 'spreading' their awards based on the spread of awards from monitoring or Guiding Assessment Tasks.

3. Standards and requirements in senior secondary education and training

3.1 Background – the Tasmanian Qualifications Authority

Since 2004, Tasmania has not had a separate board of studies as is found in other states and territories. The relevant responsibilities are part of the work of the Tasmanian Qualifications Authority (TQA) which was established under the *Tasmanian Qualifications Authority Act 2003*.

The TQA works in three sectors of education: senior secondary, vocational education and training, and higher education (non-self-accrediting).

The TQA issues consolidated statements of qualifications, including the Tasmanian Certificate of Education (TCE); accredits courses for senior secondary education, vocational education and training and higher education; registers providers of vocational education and training and higher education; and advises the Minister about matters relating to qualifications. The TQA is responsible for assessment and certification in senior secondary TCE syllabuses and TQA accredited courses. It recognises other awards and courses on the TCE including VET qualifications and competencies.

The TQA's vision and mission statements identify its role in contributing to the goals of creating "a culture that encourages people to learn and develop new skills, including life skills, throughout their lives", and ensuring that "education and training provides our workforce with the skills to support our business and industry" (Goals from *Tasmania Together)*.

The TQA recognises that

- many young Tasmanians are participating and achieving in senior secondary education and training much less than they can
- much higher rates of participation and achievement in senior secondary education and training are important for the social and economic future of these young people and of Tasmania
- approaches and practices of senior secondary education and training will be a significant factor in achieving major improvements in rates of participation and achievement.

The TQA's role across three sectors means that it has direct experience and understanding of the complexity and diversity of today's education and training; of how standards are defined and maintained in different sectors; and of the many pathways that people can and do follow.

3.2 Senior secondary education and training – a phase of learning different from the compulsory years

The TQA sees senior secondary education and training more as the first phase of life-long learning after compulsory school than as the last two years of full-time schooling. This phase of learning involves a diversity of learning, multiple pathways and a variety of institutional and non-institutional settings, individually and in combinations, including education and training in the work-place. Accordingly, qualifications, course development, accreditation and standards as well as assessment techniques and tools for this phase of students' learning should be designed, managed and operated in ways that reflect and support this diversity and flexibility.

3.3 Standards for the new Tasmanian Certificate of Education

The TQA recently approved a new qualification (to be called the Tasmanian Certificate of Education) for first issue in 2009. Unlike the existing Tasmanian Certificate of Education, this new qualification sets expectations that nearly all people should by end of this phase of their learning have met or done better than a set of standards in literacy, numeracy, ICT, participation and achievement, and pathway planning.

The aims/purposes of this new qualification are to:

- recognise that a person has achieved or exceeded a set of requirements marking the end of the first phase of post-compulsory education and training
- recognise that these requirements can be achieved or exceeded in different ways, in different settings and over different periods of time – whether in full- or part-time programs at school/college or through registered training organisations or through combining work and training
- record both achievement and participation in formal and informal learning.

The objectives of introducing and maintaining the new qualification are:

- to set and maintain a worthwhile and achievable set of standards for students to achieve or exceed when completing the initial phase of their post-compulsory education and training
- to build and maintain widespread community confidence in, and understanding of, the credibility and integrity of the formal certification that students have achieved or exceeded these standards
- to reflect and support increases in the participation and achievement of Tasmanians in this phase of their learning.

From 2009, a person will be awarded the Tasmanian Certificate of Education by the TQA if assessed by the TQA as meeting or doing better than standards for:

- everyday adult reading, writing and communication (literacy skills to National Reporting System Level 3)
- everyday adult mathematics (numeracy skills to National Reporting System Level 3)
- everyday adult use of computers and the internet
- completion of a full program of senior secondary education and training
- development and review of plans for their future.

It should be noted that the definition of completion of full program of senior secondary education and training is, for students in the institutional setting of a traditional school, equivalent to two years' "full-time" study. A person who completes an apprenticeship while employed will also more than meet this requirement. Another may meet this requirement by combining elements of school study with nationally recognised training. There is no maximum time period, however, since the purpose of the qualification is to set standards that should be met or exceeded, not to prescribe time limits or institutional settings.

For the same reasons, the key requirements for literacy, numeracy and ICT are described in terms of standards for everyday adult reading, writing, communicating, mathematics and use of the computer and internet, not in terms of school subjects, although results in school subjects can, of course, be

used to demonstrate that these requirements have been met. The idea that 'academic' standards in these areas can be met in many different ways and different settings is an important difference between the new Tasmanian Certificate of Education and senior secondary certificates that are based on the assumption that the 'correct' way to complete this phase of learning is through a two-year full-time 'academic' program in a school.

3.4 Academic standards

There is an important difference between standards in the sense of descriptions of performance or expectations and standards in the sense of what people actually achieve. The conflation of these two leads to unjustified assumptions that specifying high standards in the sense of expectations or descriptions of performance will, naturally and easily, lead to high standards of actual achievement. This obviously is not so – the preparation of an Olympic runner needs a lot more than specifying the likely winning time. In terms of university entrance to the prestigious *grandes écoles* in France, the performance standards for students who succeed at the *concours* are very high indeed. And very few students reach these standards.

A critical task for Tasmania is making significant increases in participation and achievement in the senior secondary phase of learning. As is clear from the high rates of participation and achievement in this phase in, for example, Finland and South Korea, this is not merely a matter of specifying standards in the sense of expectations, although a central reason for the new Tasmanian Certificate of Education is to send a clear signal to young people and to education and training providers that more and better achievement is important for the social and economic future of these young people and of Tasmania.

During their senior secondary phase of learning, young people in Tasmania may learn through senior secondary courses that have been accredited by the TQA, through VET courses based on nationally recognised training packages or, in other areas, through other VET courses, which are accredited by the TQA or a VET course accrediting body in another jurisdiction. All of these accreditation processes demand that course proponents demonstrate that their courses meet standards for comprehensive consultation with relevant stakeholders – industry, employers, further education and training providers, universities. It is through standards of this kind that the community can be assured that accredited courses set appropriate standards (in the sense of expectations), whether they be for courses intended to prepare students for further education, further training or for the workplace. Of course, since a particular course may lead to multiple destinations, there are compromises in cases where different stakeholders have different expectations.

3.5 The importance of a focus on quality knowledge and skills outcomes

Standards in vocational education and training have, following a COAG decision, sought to take a focus on monitoring quality skills outcomes. The TQA sees the importance of increasing the emphasis on monitoring quality knowledge and skills outcomes in the senior secondary sector rather than the traditional approach in this sector of a focus on reviewing, defining and redefining the inputs – the definitions of content and standards – and the outputs – test and examination results. Monitoring the quality knowledge and skills outcomes of the senior secondary phase of learning involves systematic exploration of the skills and knowledge students demonstrate in their immediate post-senior secondary destinations and the match of these with the descriptions of their standards of

achievement on their certificates. There is currently little systematic information of this kind; instead there is copious anecdote and supposition. Of course, it is a truism that each generation laments the decline of standards shown by the young, a lamentation that misses essential matters including demographic change (there are many more people participating in education and training today than there were thirty years ago; patterns of work-force participation have changed significantly), changing technology (no-one needs to use a slide rule or logarithm tables for calculations today), changing (and new) knowledge, changing values and expectations.

3.6 Requirements for progress to further education and training

A focus group study commissioned by the Tasmanian Qualifications Authority identified that for a significant proportion of persons with little or no education beyond year 10 the central requirements for progress to further education and training are perceptions of its value and relevance to them. Many of these see no need for, and no value to them in further education and training. Whether or not they have the required knowledge and skills to progress is not as important as their attitude towards and interest in further progress. The challenge for Tasmania is that patterns of demographic change and the likely future demands of the workplace mean that it is precisely this group that needs to be encouraged to participate in further education and training.

There are significant difficulties with an assumption that there is, for example, a list of 101 things a young person needs to know and to be able to do to participate in further education and training, including that

- a brief review of the history of education and training over the last two centuries shows that there is continuing and deep disagreement about whether there should or could be a single list of core knowledge and competencies, whether there should be multiple lists for different destinations and what should be in such a list or sets of lists or them, especially for stages of education beyond elementary
- further education and training beyond the senior secondary phase is very diverse – it reflects the diversity, complexity and multi-faceted nature of modern society
- attempts to define key skills (for example, the key competencies, employability skills) have produced what are essentially unclear generalities (such as problem-solving) that take on different meanings in different contexts.

Nonetheless, many students do successfully progress to further education and training. The TQA has an active partnership with the University of Tasmania, one element of which is a commitment to reviewing the match of skills and knowledge of first year entrants not only to the senior secondary qualifications they have but also to the requirements of the courses in which they enrol – it is possible that some would be suited to advanced placement.

3.7 Tertiary Entrance

Rules and procedures for tertiary entrance are determined by the University of Tasmania (UTAS). Higher education institutions set the minimum standards they require for entry to particular courses. The actual academic standards of students who enter particular courses often reflect the balance of supply and demand for places. Entry to some courses is highly competitive.

As part of its partnership with the University of Tasmania, the TQA calculates tertiary entrance scores and converts these to nationally comparable tertiary entrance ranks (TER) using agreed rules and procedures. A TER is an estimate of a student's percentile ranking in the *total* age-cohort, not just a ranking of eligible students. The national comparability of the TER is based on the assumption that the total age-cohort in Tasmania is comparable in ability with the total age-cohorts in other states.

In 2007, a TER will be calculated for students who have completed two years (or the equivalent) of senior secondary study and have satisfactorily completed the equivalent of a minimum of four eligible senior secondary courses , with at least three being done in Year 12 (or Year 13). Results in UTAS High Achiever Program studies can also count towards the TER.

A maximum of the equivalent of five eligible courses can count towards the TER, provided they were undertaken in Year 12 (or Year 13) and one other year. A student who has completed the same eligible course twice can only count one of the two results towards a TER. An eligible course is one which meets agreed requirements for quality assurance of results and has a suitable level of complexity/demand (level 3 in the scheme developed by the Victorian Credit Matrix).

In 2006, the University of Tasmania approved schedules and tables allowing the determination of an equivalent TER for students not eligible for a TER, up to a maximum equivalent TER of 65. This processes uses results in all TQA accredited and recognised courses as well as VET competencies and certificates.

4. Vocational Education and Learning - preparing students for further education, training and employment

4.1 Background – *Guaranteeing Futures*

As described in Section 3 above, the Tasmanian government recognises the importance of continued engagement in learning for young people after year 10. In order to encourage this engagement a major strategy, *Tasmania: A State of Learning,* was launched in 2004 and is continuing to be implemented in 2007.

Guaranteeing Futures is a key element of this strategy. Its focus is on supporting young people as they move from compulsory schooling into the next stage of their lives. The pathways that young people take to independent adulthood are varied and might include college, vocational education and training delivered through a school, college, TAFE or private provider, an apprenticeship or traineeship, involvement in higher education or community education, casual, part-time or full-time employment or a combination of these. The Department believes in the importance of supporting young people to acquire the knowledge, skills and attributes that will enable them to realise their individual potential and in valuing the individual pathways that they take which will enable them to participate in the workplace and contribute to society.

Guaranteeing Futures initiatives which support this individualised approach to personalised and strategic future planning for students from years 8 to 10, include the introduction of legislation, pathway planning, provision of increased vocational learning opportunities in school, curriculum development and the continuation of the Youth Learning Officers network which was established to support those student identified as needing additional support in their transition.

4.2 Introduction of legislation

To ensure that young people continue to be engaged in learning and receive the benefits associated with ongoing participation in education and training, the Tasmanian government passed the *Youth Participation in Education and Training Act 2005.* This Act requires that from 2008 all students who have completed year 10 or turned 16 will participate in education or training for a further two years or until they turn 17. The options available for young people include continuing their education at college, participating in some form of vocational training through TAFE Tasmania or a private provider, or gaining full time employment. Having participated in three years of pathway planning (see point 4.2), it is anticipated that young people leaving year 10 will be well equipped with the knowledge and skills required to make informed decisions about the most appropriate option for their clearly identified individual needs.

4.3 Pathway Planning

Pathway Planning is now in its third year for students in Tasmanian government high schools. It began for year 8 students in 2005, was extended to include year 9 students in 2006 and this year includes year 10 students. By the end of 2007, the present year 10 students will have undertaken 3 years of individualised pathway planning.

The Pathway Planning resource, developed to support students in the pathway planning process, has been distributed to all high schools and district high schools.

Pathway planning has three components:

- the Pathway Plan;
- the Pathway Planning Officers (PPOs) in every government school; and

- curriculum materials available to teachers to support the work of the PPOs.

The equivalent of forty full time PPOs have been employed and are working in schools, providing all young people with individual support in making decisions about their futures. These PPOs bring a range of skills from diverse backgrounds which assist students, parents and teachers to increase their awareness and understanding of transition and pathway options available to young people at the end of their compulsory schooling.

Pathway Planning has also supported the development of a range of new partnerships with business, industry, training providers (especially TAFE Tasmania) and the broad community. These have provided valuable opportunities for students to be exposed to the world of work during their high school years and to understand the variety of options open to them.

4.5 "Intention to participate"

The Year 10 Pathway Planning resource includes a *Statement of Intent* document which students will be required to complete at the end of year 10. The information on this document which includes the student's 'intended destination' in the following year is required (under the *Youth Participation in Education and Training Act* legislation) to be lodged with the Tasmanian Qualification Authority. Data collected from this will be used to track students from their intended destination to where they are actually located six months into the following year.

4.6 Youth Learning Officer network

A statewide network of Youth Learning Officers (YLOs) was established in 2004. YLOs work with targeted year 10 students (including students who are high academic achievers) who are identified as having barriers to making a successful transition from school to post school options.

The YLOs provide individual case management for students during the last part of their year 10 and the first part of the following year. The work of the Youth Learning Officer network continues to see an increased level of successful transition outcomes. Their work is highly valued by schools, TAFE Tasmania and employers who liaise closely with the YLOs to assist young people in achieving and maintaining their post year 10 destination choices.

4.7 Year 11/12 Curriculum Framework

In 2007 the development of year 11/12 courses is being undertaken as part of the implementation of the new year 11/12 Curriculum Framework following the post year 10 Curriculum Review completed in 2005.

4.8 Year 11/12 programs

Year 11/12 courses are offered in a number of rural district high schools and Skill Centres to diminish the impact of travel on students' ability to participate post year 10. This includes the provision of VET courses and flexible learning opportunities.

4.9 School-based traineeships

School-based traineeships allow young people to be paid for their time at work, but also be enrolled as full-time students and receive a certificate or statement of attainment that details the skills they have acquired while working.

4.10 Vocational learning and industry partnerships

The provision of increased vocational learning opportunities in Tasmanian schools and colleges not only assist young people in making decisions about the future but are also enable skill shortage areas within Tasmania to be highlighted to young people as potential future employment areas.

In 2006 the Tasmanian Department of Education began a revision of the Tasmanian Curriculum Framework. Vocational and Applied Learning has been added to this framework to cover the many technology, enterprise, business and community learning opportunities that exist for Year 7 to 10 students and work is continuing to link this to literacy and numeracy and the development of highly valued employment skills.

A *Guaranteeing Futures* initiative saw the extension of the Vocational Education and Learning Development Officers (VELDOs) network, providing staff to work in schools and colleges to help teachers to develop an understanding of vocational learning, and to support them to develop programs and opportunities for young people to access authentic learning opportunities in the school and in the workplace.

An online 'Vocational Events and Experiences' Calendar has been established which centralises information on activities which might enhance vocational learning in schools.

Schools and colleges continue to work in partnership with a variety of business and organisations to provide school students with opportunities for authentic learning. This includes participation in Australian Business Week, the Student Enterprise Grants Scheme and a variety of programs supported by organisations like the Housing Industry Association and TAFE Tasmania.

4.11 Area Taskforces

Three regional Area Taskforces are funded through a Guaranteeing Futures initiative. These organisations are working to bring together stakeholders to identify and collaborate on effective education, training and employment strategies for young people best suited to the recognised local needs in their communities.